Graphics Feature Status

- Canvas: Software only, hardware acceleration unavailable
- Flash: Hardware accelerated
- Flash Stage3D: Hardware accelerated
- Flash Stage3D Baseline profile: Hardware accelerated
- Compositing: Hardware accelerated
- Multiple Raster Threads: Disabled
- Native GpuMemoryBuffers: Software only. Hardware acceleration disabled
- Rasterization: Software only. Hardware acceleration disabled
- Video Decode: Software only, hardware acceleration unavailable
- Video Encode: Hardware accelerated
- WebGL: Hardware accelerated

Driver Bug Workarounds

- clear_uniforms_before_first_program_use
- count_all_in_varyings_packing
- disable_framebuffer_cmaa
- disable_post_sub_buffers_for_onscreen_surfaces
- msaa_is_slow
- scalarize_vec_and_mat_constructor_args

Problems Detected

- Accelerated 2d canvas is unstable in Linux at the moment
  Disabled Features: accelerated_2d_canvas
- Accelerated video decode is unavailable on Linux: 137247
  Disabled Features: accelerated_video_decode
- EXT_occlusion_query appears to be buggy with Intel GPUs on Linux
- Clear uniforms before first program use on all platforms: 124764, 349137
  Applied Workarounds: clear_uniforms_before_first_program_use
- Mesa drivers in Linux handle varyings without static use incorrectly: 333885
  Applied Workarounds: count_all_in_varyings_packing
- Disable partial swaps on linux drivers: 339493
  Applied Workarounds: disable_post_sub_buffers_for_onscreen_surfaces
- Always rewrite vec/mat constructors to be consistent: 398694
  Applied Workarounds: scalarize_vec_and_mat_constructor_args
- On Intel GPUs MSAA performance is not acceptable for GPU rasterization: 527565
  Applied Workarounds: msaa_is_slow
- Timer queries crash on Intel GPUs on Linux: 540543, 576991
- Limited enabling of Chromium GL_INTEL_framebuffer_CMAA: 535198
  Applied Workarounds: disable_framebuffer_cmaa
- Accelerated rasterization has been disabled, either via blacklist, about:flags or the command line.
  Disabled Features: rasterization
- Raster is using a single thread.
  Disabled Features: multiple_raster_threads
- Native GpuMemoryBuffers have been disabled, either via about:flags or command line.
  Disabled Features: native_gpu_memory_buffers

Version Information

Data exported	11/15/2016, 12:42:56 AM
Chrome version	Chrome/53.0.2785.143

Operating system	Linux 4.7.2-galliumos
Software rendering list version	11.7
Driver bug list version	8.93
ANGLE commit id	unknown hash
2D graphics backend	Skia
Command Line Args	--enable-pinch --window-depth=24 --x11-visual-id=32 --wm-user-time-ms=2289895 --flag-switches-begin --flag-switches-end

Driver Information

Initialization time	50
In-process GPU	false
Sandboxed	true
GPU0	VENDOR = 0x8086, DEVICE= 0x1606
Optimus	false
AMD switchable	false
Driver vendor	Mesa
Driver version	11.2.0
Driver date	
Pixel shader version	1.30
Vertex shader version	1.30
Max. MSAA samples	8
Machine model name	
Machine model version	
GL_VENDOR	Intel Open Source Technology Center
GL_RENDERER	Mesa DRI Intel(R) Broadwell GT1
GL_VERSION	3.0 Mesa 11.2.0
	GL_3DFX_texture_compression_FXT1 GL_AMD_conservative_depth GL_AMD_draw_buffers_blend GL_AMD_seamless_cubemap_per_texture GL_AMD_shader_trinary_minmax GL_ANGLE_texture_compression_dxt3 GL_ANGLE_texture_compression_dxt5 GL_APPLE_object_purgeable GL_APPLE_packed_pixels GL_APPLE_vertex_array_object GL_ARB_ES2_compatibility GL_ARB_ES3_compatibility GL_ARB_arrays_of_arrays GL_ARB_blend_func_extended GL_ARB_buffer_storage GL_ARB_clear_buffer_object GL_ARB_clear_texture GL_ARB_clip_control GL_ARB_color_buffer_float GL_ARB_compressed_texture_pixel_storage GL_ARB_conditional_render_inverted GL_ARB_conservative_depth GL_ARB_copy_buffer GL_ARB_copy_image GL_ARB_debug_output GL_ARB_depth_buffer_float GL_ARB_depth_clamp GL_ARB_depth_texture GL_ARB_derivative_control GL_ARB_draw_buffers GL_ARB_draw_buffers_blend GL_ARB_draw_elements_base_vertex GL_ARB_draw_instanced GL_ARB_explicit_attrib_location GL_ARB_explicit_uniform_location GL_ARB_fragment_coord_conventions GL_ARB_fragment_program GL_ARB_fragment_program_shadow GL_ARB_fragment_shader GL_ARB_framebuffer_no_attachments GL_ARB_framebuffer_object GL_ARB_framebuffer_sRGB GL_ARB_get_program_binary GL_ARB_get_texture_sub_image GL_ARB_half_float_pixel

GL_EXTENSIONS	GL_ARB_half_float_vertex GL_ARB_instanced_arrays GL_ARB_internalformat_query GL_ARB_invalidate_subdata GL_ARB_map_buffer_alignment GL_ARB_map_buffer_range GL_ARB_multi_bind GL_ARB_multisample GL_ARB_multitexture GL_ARB_pipeline_statistics_query GL_ARB_pixel_buffer_object GL_ARB_point_parameters GL_ARB_point_sprite GL_ARB_program_interface_query GL_ARB_provoking_vertex GL_ARB_robustness GL_ARB_sample_shading GL_ARB_sampler_objects GL_ARB_seamless_cube_map GL_ARB_seamless_cubemap_per_texture GL_ARB_separate_shader_objects GL_ARB_shader_atomic_counters GL_ARB_shader_bit_encoding GL_ARB_shader_clock GL_ARB_shader_draw_parameters GL_ARB_shader_image_load_store GL_ARB_shader_image_size GL_ARB_shader_objects GL_ARB_shader_storage_buffer_object GL_ARB_shader_texture_image_samples GL_ARB_shader_texture_lod GL_ARB_shading_language_100 GL_ARB_shading_language_420pack GL_ARB_shading_language_packing GL_ARB_shadow GL_ARB_stencil_texturing GL_ARB_sync GL_ARB_texture_barrier GL_ARB_texture_border_clamp GL_ARB_texture_compression GL_ARB_texture_compression_bptc GL_ARB_texture_compression_rgtc GL_ARB_texture_cube_map GL_ARB_texture_cube_map_array GL_ARB_texture_env_add GL_ARB_texture_env_combine GL_ARB_texture_env_crossbar GL_ARB_texture_env_dot3 GL_ARB_texture_float GL_ARB_texture_gather GL_ARB_texture_mirror_clamp_to_edge GL_ARB_texture_mirrored_repeat GL_ARB_texture_multisample GL_ARB_texture_non_power_of_two GL_ARB_texture_query_levels GL_ARB_texture_query_lod GL_ARB_texture_rectangle GL_ARB_texture_rg GL_ARB_texture_rgb10_a2ui GL_ARB_texture_storage GL_ARB_texture_storage_multisample GL_ARB_texture_swizzle GL_ARB_texture_view GL_ARB_transform_feedback2 GL_ARB_transform_feedback3 GL_ARB_transform_feedback_instanced GL_ARB_transpose_matrix GL_ARB_uniform_buffer_object GL_ARB_vertex_array_bgra GL_ARB_vertex_array_object GL_ARB_vertex_attrib_binding GL_ARB_vertex_buffer_object GL_ARB_vertex_program GL_ARB_vertex_shader GL_ARB_vertex_type_10f_11f_11f_rev GL_ARB_vertex_type_2_10_10_10_rev GL_ARB_window_pos GL_ATI_blend_equation_separate GL_ATI_draw_buffers GL_ATI_separate_stencil GL_ATI_texture_env_combine3 GL_ATI_texture_float GL_EXT_abgr GL_EXT_bgra GL_EXT_blend_color GL_EXT_blend_equation_separate GL_EXT_blend_func_separate GL_EXT_blend_minmax GL_EXT_blend_subtract GL_EXT_compiled_vertex_array GL_EXT_copy_texture GL_EXT_draw_buffers2 GL_EXT_draw_instanced GL_EXT_draw_range_elements GL_EXT_fog_coord GL_EXT_framebuffer_blit GL_EXT_framebuffer_multisample GL_EXT_framebuffer_multisample_blit_scaled GL_EXT_framebuffer_object GL_EXT_framebuffer_sRGB GL_EXT_gpu_program_parameters GL_EXT_multi_draw_arrays GL_EXT_packed_depth_stencil GL_EXT_packed_float GL_EXT_packed_pixels GL_EXT_pixel_buffer_object GL_EXT_point_parameters GL_EXT_polygon_offset

	GL_EXT_polygon_offset_clamp GL_EXT_provoking_vertex GL_EXT_rescale_normal GL_EXT_secondary_color GL_EXT_separate_specular_color GL_EXT_shader_integer_mix GL_EXT_shader_samples_identical GL_EXT_shadow_funcs GL_EXT_stencil_two_side GL_EXT_stencil_wrap GL_EXT_subtexture GL_EXT_texture GL_EXT_texture3D GL_EXT_texture_array GL_EXT_texture_compression_dxt1 GL_EXT_texture_compression_rgtc GL_EXT_texture_compression_s3tc GL_EXT_texture_cube_map GL_EXT_texture_edge_clamp GL_EXT_texture_env_add GL_EXT_texture_env_combine GL_EXT_texture_env_dot3 GL_EXT_texture_filter_anisotropic GL_EXT_texture_integer GL_EXT_texture_lod_bias GL_EXT_texture_object GL_EXT_texture_rectangle GL_EXT_texture_sRGB GL_EXT_texture_sRGB_decode GL_EXT_texture_shared_exponent GL_EXT_texture_snorm GL_EXT_texture_swizzle GL_EXT_transform_feedback GL_EXT_vertex_array GL_EXT_vertex_array_bgra GL_IBM_multimode_draw_arrays GL_IBM_rasterpos_clip GL_IBM_texture_mirrored_repeat GL_INGR_blend_func_separate GL_KHR_context_flush_control GL_KHR_debug GL_MESA_pack_invert GL_MESA_texture_signed_rgba GL_MESA_window_pos GL_NV_blend_square GL_NV_conditional_render GL_NV_depth_clamp GL_NV_light_max_exponent GL_NV_packed_depth_stencil GL_NV_primitive_restart GL_NV_texgen_reflection GL_NV_texture_barrier GL_NV_texture_env_combine4 GL_NV_texture_rectangle GL_OES_EGL_image GL_OES_read_format GL_S3_s3tc GL_SGIS_generate_mipmap GL_SGIS_texture_border_clamp GL_SGIS_texture_edge_clamp GL_SGIS_texture_lod GL_SUN_multi_draw_arrays
Disabled Extensions	GL_ARB_occlusion_query GL_ARB_occlusion_query2 GL_ARB_timer_query GL_EXT_timer_query
Window system binding vendor	SGI
Window system binding version	1.4
Window system binding extensions	GLX_ARB_create_context GLX_ARB_create_context_profile GLX_ARB_create_context_robustness GLX_ARB_fbconfig_float GLX_ARB_framebuffer_sRGB GLX_ARB_multisample GLX_EXT_create_context_es_profile GLX_EXT_create_context_es2_profile GLX_EXT_fbconfig_packed_float GLX_EXT_framebuffer_sRGB GLX_EXT_import_context GLX_EXT_texture_from_pixmap GLX_EXT_visual_info GLX_EXT_visual_rating GLX_MESA_copy_sub_buffer GLX_OML_swap_method GLX_SGI_swap_control GLX_SGIS_multisample GLX_SGIX_fbconfig GLX_SGIX_pbuffer GLX_SGIX_visual_select_group GLX_INTEL_swap_event
Window manager	Xfwm4
XDG_CURRENT_DESK	XFCE
Compositing manager	Yes
Direct rendering	Yes
Reset notification strategy	0x8252

GPU process crash count	0

Compositor Information

Tile Update Mode	One-copy
Partial Raster	Enabled

GpuMemoryBuffers Status

ATC	Software only
ATCIA	Software only
DXT1	Software only
DXT5	Software only
ETC1	Software only
R_8	Software only
BGR_565	Software only
RGBA_4444	Software only
RGBX_8888	Software only
RGBA_8888	Software only
BGRX_8888	Software only
BGRA_8888	Software only
YVU_420	Software only
YUV_420_BIPLANAR	Software only
UYVY_422	Software only